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ABSTRACT

This teaching unit on the railroad is part of the Transportation Occupations Career Cluster included in a series of career guidebooks developed by Project CHOICE (Children Have Options in Career Education). The units are designed to provide the classroom teacher with a source of career-related activities linking first and second grade classroom experiences with the world of work. Each unit follows a typical format that includes the unit rationale, goals, performance objectives, entry-level assessment, suggested instructional materials (including books, films, and filmstrips), and instructional strategy. The instructional strategy section contains seven lessons designed to expose students to some of the terminology and background related to workers on trains and at railroad yards. Each lesson is comprised of the following sections: purpose, materials, introduction, class activities, and summary activity. Task cards are appended. (This guide is one of fourteen in the series for grades 1 and 2.) (LRA)

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OFFICE OF CLAUDE W. RICHARDSON
KERN COUNTY SUPERINTENDENT OF SCHOOLS

Project CHOICE

169

A CAREER EDUCATION UNIT FOR GRADES K--2

THE RAILROAD

(Transporation Occupations Career Cluster)

CE 025 888

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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January, 1978

FOREWORD

Project CHOICE: Children Have Options in Career Education, is an Exemplary Project from the San Diego City School District, which has been adapted, with ESEA Title IV-C funding, for Kern County Schools.

Through Project CHOICE, units have been developed to provide the classroom teacher with a source of career-related activities linking classroom experiences with the world of work. All students, regardless of their post-high school plans, share an equal need for career awareness, decision making skills, and other elements of career education. This goal can be accomplished if all teachers and counselors "fit" the appropriate units where they best apply in the curriculum.

We are indebted to the San Diego City School District, and the Project CHOICE staff, for developing and field testing the original units.

For their excellent work in re-writing the units in order to adapt them for use in Kern County Schools, we wish to recognize:

Patricia Alexander
Kernville Union School District
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Sharon Shires
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Cynthia Silliman
Richland School District

Janet S Wells

Janet Wells
Career Education Resource Teacher
Guidance Services

TRANSPORTATION OCCUPATIONS

CAREER CLUSTER:

THE RAILROAD

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TRANSPORTATION OCCUPATIONS CAREER CLUSTER:

THE RAILROAD

TEACHERS' GUIDE

RATIONALE

Most children are interested in trains and have seen trains. In this unit, students will be exposed to some terminology and background related to workers on trains and at railroad yards. Job appreciation and worker attitudes will also be explored.

GOALS

Through this unit, the students will:

- -Learn about the operation of a train.
- -Become aware of service and goods that trains provide our communities.
- -Acquire an understanding of the tasks performed by employees of railroads.
- -Gain an appreciation and understanding of the railroad workers.
- -Become aware of career opportunities in the railway industry.
- -See the relationship between educational skills and working and/or using train facilities.

PERFORMANCE OBJECTIVES

By the end of this unit, the students will be able to:

- -Identify four jobs necessary to the functioning of a train.
- -Name at least six items delivered to our communities by trains.
- -Name at least four workers necessary to the functioning of a railway and be able to tell something about their responsibilities.
- -List some safety rules and gain an understanding of their necessity.
- -Name at least three skills necessary in order for the employee of a railway to do his job.

ENTRY LEVEL ASSESSMENT

Use this informal inventory to determine the class awareness of the railroad industry:

1. Name some services that railways provide to our community.

2. List some jobs necessary to run a railway.

3. Name some skills that the employees at the railway would need to have in order to do their jobs.

4. Tell some rules that are necessary in order to make the railway safe.

EVALUATION

The final lesson has been set aside for evaluation. The Entry Level Assessment may be used as a pretest as well as a post-test, or the teacher may wish to develop his/her own. Responses may be taped or written, so that comparisons may be made in order to determine how well pupils have achieved the objectives.

SUGGESTED INSTRUCTIONAL MATERIALS

Use the following materials and equipment in this unit:

-Films and filmstrips as listed.
-Books as listed.
-A variety of art materials.
-Task cards.
-Film and filmstrip projector

Books:

Title	Author
The Big Book of Real Trains	Cameron
Fast Trains! Busy Trains!	Barr
Freight Train	Bunce
First Book of Trains	Hamilton
About the Engineer of a Train	Johnson
All Aboard the Train	Kessler
I Want To Be a Train Engineer	Greene
Railroad Engineers and Airplane Pilots	Greene

RESOURCE MATERIALS

Send to Association for American Railroad Office of Information and Public Affairs, 1920 L Street, N.W., Washington, D.C. 20036

Ask for: "Safety With Trains", "Railroad Freight Cars and What They Do", "Railroads and the Growth of America", "Locomotives That Made History".

Field trip: Contact Amtrack, 15th & F Streets, Bakersfield, Calif., 322-3031

THE USE OF TASK CARDS

Task cards will require the help of a tutor or parent volunteer in order for the directions to be read and explained. The size of the group doing the tasks will depend on class make-up and needs. It is not the intention that all task cards be completed by every student. In some instances, total group activities of one task card would satisfy the purpose.

INSTRUCTIONAL STRATEGY: LESSONS 1-7

Lesson 1 (Two class periods may be used for this lesson.)

PURPOSE

To familiarize the students with the jobs and workers related to the railroad.

MATERIALS

1. Entry Level Assessment.
2. Chart paper.
3. List of Railroad Workers, next page.
4. Complete list of Railroad Workers, following pages, from the Dictionary of Occupational Titles.
5. Teacher Information Sheet, following pages.
6. Task cards 1 through 11.

INTRODUCTION

Say: "See how many railroad workers you can name. We can make a list of the jobs we know about. I'll add some too."

CLASS ACTIVITIES

1. Take pre-test.
2. Make a composite list of railroad workers.
3. Do task cards.

SUMMARY

1. Review the list of workers.
2. Individual reports from children using task cards.

RAILROAD WORKERS
(To be used with Lesson 1)

Agent

Baggageman

Brakeman

Car Inspector

Conductor

Crossing Watchman

Dispatcher

Engineer

Kitchen Crew

Operator - Yard Tower

Policeman or Special Agent

Pullman Conductor

Pullman Porter

Railway Express Messenger

Railway Postal Clerks

Section Crew

Switchman

Signal Maintainer

Ticket Seller or Agent

Towerman Terminal

Waiter - Dining Car

Yardmaster

RAILROAD WORKERS - FROM THE DICTIONARY OF OCCUPATIONAL TITLES
(To be used with Lesson 1)

Railroad Transportation Occupations

This group includes occupations concerned with transportation passengers and freight by controlling movement of trains and other railway vehicles; collecting fares from passengers and giving information; shifting railway cars in classification yards; supplying fuel; adjustments in alinement of tracks; signaling operational information; cleaning and lubricating equipment; and related activities.

Foreman, Branch Office, Railway Express

Freight-Loading Foreman

Road Foreman of Engines

Yardmaster

Railway and Mail Agent

Car-Cleaning Foreman

Circus Trainmaster

Conductor, Yard
engine foreman
head switchman
yard conductor
yard lineman

Locomotive-Engine Foreman

Railway-Express Agent

Station Agent
agent telegrapher
freight and passenger agent

Car Chaser (malt liquors)

Car Clerk (pullman)
pullman clerk

Director, Trains
track inspector

Passenger Representative

Emergency Man

Rail-Flaw Detector Operator

Railroad-Car Inspector

Railroad Car Inspector
brake inspector
car checker
carman
journal-box inspector

ENGINEER
(Use with Lesson 1)

The engineer must be alert, dependable and trustworthy. The engineer must pass a rigid examination to prove that he is thoroughly familiar with the technical details of the engines operations, and also familiar with the signals and the rules of the railroad as published in the Railroad Rule Book. He must be acquainted with all the features of the road on which he operates his train. He must also pass a physical examination and an examination on the rule book periodically.

Engineers and other train service employees are assigned to the different runs on the basis of seniority, the man with the longest service record having the first chance and the man with the second longest service may have the second choice etc.

Sitting on the cab, the engineer keeps his eye on the track ahead of the train and watches signal indications. As the train approaches each signal the engineer notes carefully what the signal tells him. On some railroads, signals are displayed in miniature on a panel in the locomotive cab and are called cab signals. The engineer and his helper, the fireman on a passenger engine or the head end brakeman on freight trains must also be alert for signals from the conductor or rear brakeman.

The fireman's job has furnished a training place for engineers, and the engineers have been selected from firemen or helpers, through tests and serving the railroad.

The cab of a diesel road engine is high up in the front end. On the right side of the cab, to the left of the engineer's seat is the control stand with the throttle. The throttle is the lever which controls the locomotive's power. The reverse lever, automatic brake valve and other controls are within easy reach. On the instrument panel in front of the control stand are the speed recorder, air gauges, and the load and transition indicating meter, this shows the amount of electric current being used. On the instrument panel on the left side of the cab are the fuel and water gauges. Engineers have a lot to be thinking about.

Trains are equipped with radiotelephones which they use to talk to the conductor, as well as between moving trains, and between trains and fixed points. The conductor and trainmen also signal the engineer by means of hand, flag and lantern signals.

CONDUCTOR

The conductor must be able to tell the time very accurately. Watches are compared before starting on a run, and other members of the train crew must compare their watches with the conductor's or engineers at the very first chance.

The standard rule for the regulation of watches on the railroads is that no watch may vary more than 30 seconds per week from perfect time. On most railroads, certain employees in the operating of trains must give their watches to official watch inspectors for comparison.

Lesson 2

PURPOSE

To familiarize the students with various railway workers and to develop student's ability to define some of the responsibilities included in each job.

MATERIALS

1. Chart of railway workers from Lesson 1.
2. Riddles, next page.
3. Task cards 12 and 13.

INTRODUCTION

Say: "Let's review the various workers in a railway station. (Read the list made during Lesson 1.) I have some riddles for you. Can you guess what worker I'm talking about? I'll read the job responsibilities and you guess the worker."

CLASS ACTIVITIES

1. Play riddle game.
2. Use task card 12 as a group activity, to make trains.
3. Use task card 13.

SUMMARY

1. Review workers and their responsibilities.
2. Class will share trains (Task card 12).
3. Individual reports from children using task cards.

RIDDLES
(To be used with Lesson 2)

What Do I Do?

I sell railroad tickets, make reservations, quote how much it costs for the fare, help prospective travelers plan their business trips or vacations. I have to be sure that I am well informed and accurate in quoting how much the fare will be, in making reservations, in selling tickets and giving the correct amount of change back and in giving travel information. What am I? Ticket Agent.

Some railroads have a special person called a Division Passenger Agent or District Passenger Agent and I promote special services for conventions, meetings and especially conducted tours. I ask for athletic teams, theatrical troups and other groups. I help work out people's times to be able to travel by railway and am informed of hotel, other transportation agencies and vacation spots.

I help keep trains on time. I look for trouble and make sure things are safe and the cars are in good condition or I find things that may cause an accident or cause the trainto be late. I must have sharp eyes, keen ears and an alert mind as I go up and down the train looking. What am I? Car Inspector.

I sit on the right side of the cab with my eye on the track ahead of the train and watch for signals. I check my watch very carefully. Who am I? Engineer.

I know the place of every train in my area and I give the instructions which keep the trains moving on time. Operators in towers and stations along the railroad line report to me so that I will know where the trains are and I enter it on my train sheet. Who am I? Dispatcher.

Lesson 3

PURPOSE

To enable students to identify jobs necessary to the functioning of a railway and to develop an awareness of the need for school learned skills in order to do the job well.

MATERIALS

1. Magazines
2. Paper for mural.
3. Lists of workers from Lesson 1.
4. Chart paper.
5. Task cards 14 and 15.

INTRODUCTION

Say: "In our last lesson we talked about the kinds of jobs people do for a railway. Can you add more workers to the list today? --- Let's begin to determine how the things we are studying in school could help us if we had a job with the railway."

CLASS ACTIVITIES

1. On chart paper, list the four general skill areas - Academic, Social, Artistic, Physical. Develop class understanding of their meaning. Encourage the children to think about the skills they are studying in school. Try to determine which skills are necessary in order to do various railway jobs.
2. Use task cards.
3. Have a small group of children work on a mural.
4. Small group of children will work on railroad cars for the mural.

SUMMARY

1. Evaluate the mural.
2. Individual reports from children using task cards.

Lesson 4

PURPOSE

To familiarize students with the need for safety precautions taken by the railroad in order to insure maximum safety for workers and travelers.

MATERIALS

1. Book: Railroad Engineers and Airplane Pilots, by Greene.
2. Lined paper for letters.
3. Railroad crossing poster and Teacher Information, next page.
4. Task cards 16 and 17.

INTRODUCTION

Say: "Ted became angry when a railroad worker made him stop playing around freight cars on a siding. He decided to get even. He made a barricade across the tracks and then went to sit on the hillside and watch. The next train to come along would have to stop and the workers would have to get off to clear the tracks. This would cause a good bit of trouble and this is what Ted wanted. How do you think this story could end?"

CLASS ACTIVITIES

1. Have a class discussion based on the story in the introduction, stressing safety precautions.
2. Write letters for safety information:

   Association of American Railroads
   Office of Information and Public Affairs
   1920 L St., N.W.
   Washington, D.C. 20036

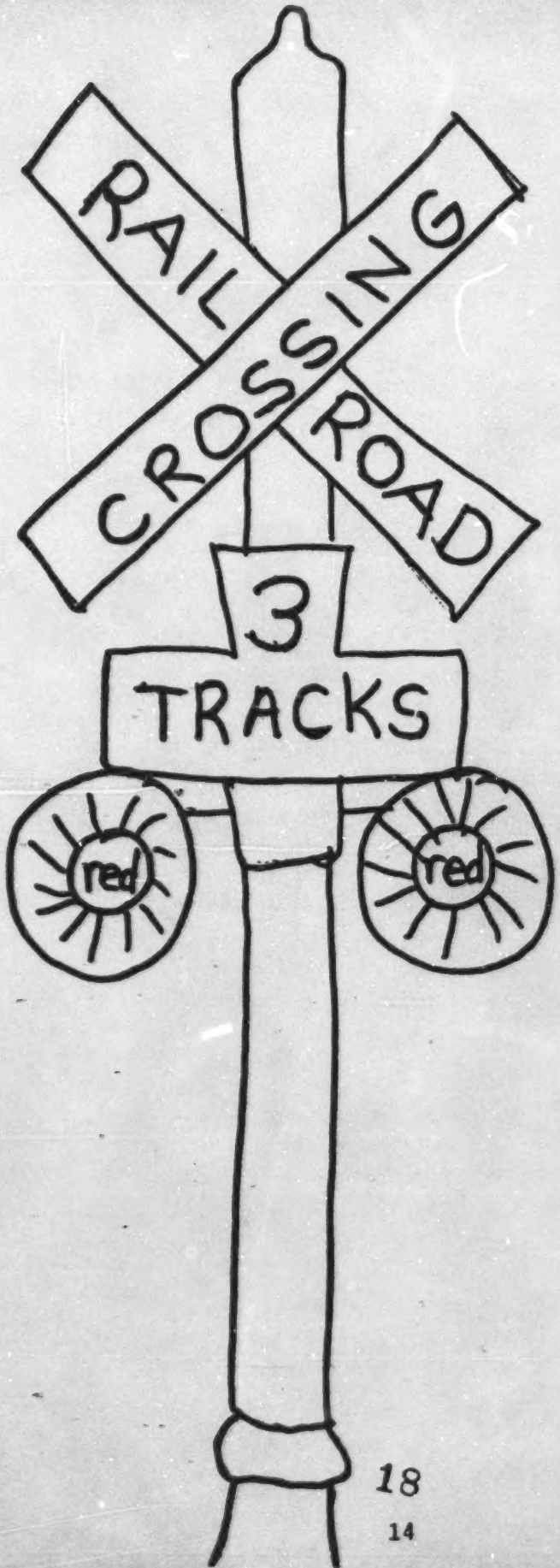
   Children should request one or more of the following:

   Safety With Trains
   Railroad Freight Cars and What They Do.

3. Construction safety signs for booklet (See Teacher Information Sheet for ideas).
4. Use task cards.

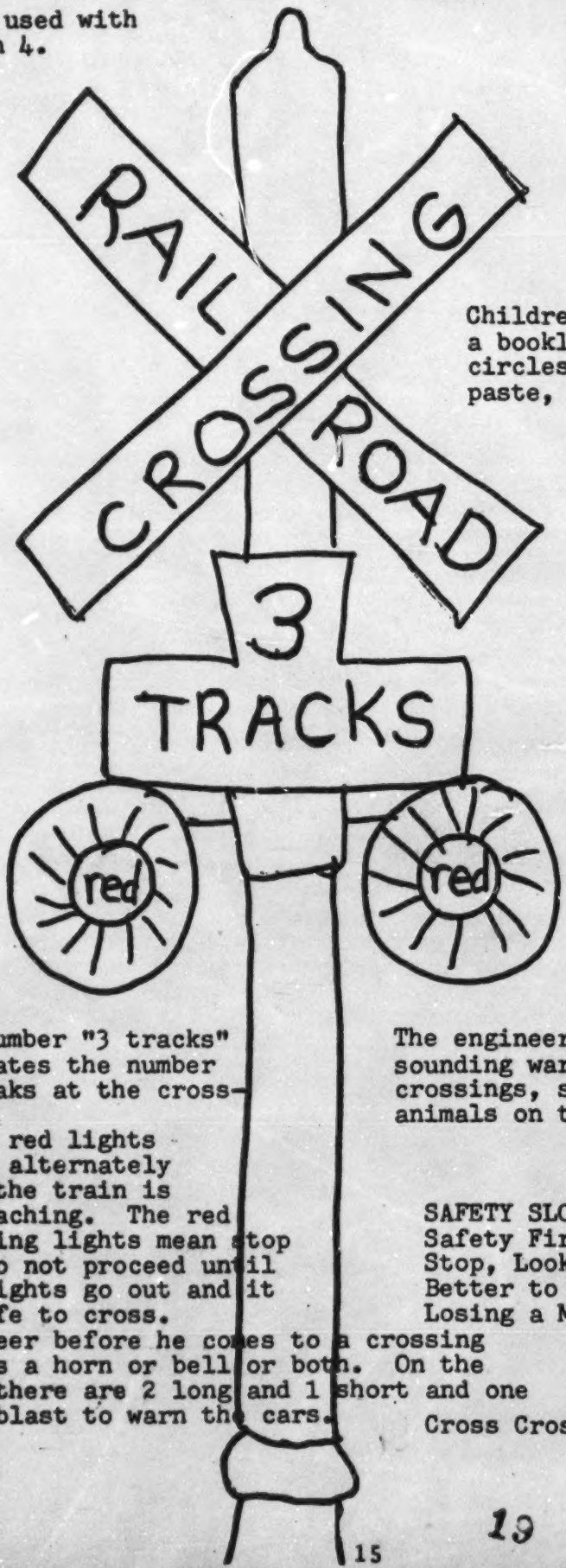
SUMMARY

1. Individual reports from children using task cards.
2. Share sign booklet.


RAIL
ROAD
CROSSING
3
TRACKS
red
red

To be used with
Lesson 4.

For Teacher
Information.



Children may construct signs for a booklet using rectangles, circles. Materials: scissors, paste, construction paper.

The number "3 tracks" indicates the number of traks at the crossing.

The 2 red lights flash alternately when the train is approaching. The red flashing lights mean stop and do not proceed until the lights go out and it is safe to cross.

Engineer before he comes to a crossing sounds a horn or bell or both. On the horn there are 2 long and 1 short and one long blast to warn the cars.

The engineer is responsible for sounding warnings upon approaching crossings, stations, and people or animals on the track.

SAFETY SLOGANS:
Safety First
Stop, Look, Listen and Live
Better to Be Safe than Sorry
Losing a Minute May Save a LIFE
Cross Crossings Cautiously

Lesson 5

PURPOSE

To familiarize the students with the various items a train carries and to make them aware of how we as consumers need and use these items.

MATERIALS

1. Magazines
2. Railroad Card Riddles, next page.
3. Task cards 18 and 19.
4. Chart paper, construction paper.

INTRODUCTION

Say: "Let's talk about some of the items you use and buy that could have traveled on a train. Think about the various workers that may have had to help get the product to you. Do you think the railroad helps your family? Community? How?"

CLASS ACTIVITIES

1. Class discussion based on introduction. List three categories on chart paper: At School, At Home, At the Playground. The children will list products that could have traveled on the train. This will be a composite list.
2. A group of children will cut pictures from magazines of various items that may have traveled on a train. They should put them under the appropriate headings: At School, At Home, At the Playground.
3. Use task cards (small groups).

SUMMARY

1. Review the list of items brought to us by rail.
2. Individual reports from children using task cards.

RIDDLES*
(To be used with Lesson 5)

1. I carry new cars from the factory and carry them to all parts of the country. I can carry 9 standard size autos and 15 compact cars. What am I? Auto car carrier.

2. I am really a big can with different kinds of things inside me. When I carry milk I have a glass or a steel lining. When I carry chemicals I am lined with rubber, lead or aluminum. I may have 1 dome on top of me or more. In warm weather the liquid expands and goes up into the dome so it will not break the seams. There are over 200 different kinds of my type. What am I? Tank car.

3. I am a metal box that has no top. I carry things that snow and rain cannot hurt and I am loaded and unloaded by men. Sometimes the men use machines to load the cars. I haul pieces of machinery, pipes, cement blocks, and steel plates. What am I? Gondola.

4. I carry trailer boxes from trucks. I can carry one or two. Some trains are made up of just my kind of car and I then travel mostly at night. The trailer boxes are secured to my deck and jacks are placed under the box. The jacks hold the box up in case the trailer gets a flat tire. I carry these with greater protection and at lower costs. What am I? Piggy back car.

5. I carry cattle and I have one deck -- if I carry sheep and pigs I have two decks. If I carry chickens and turkeys I have many decks. Animals may ride in me for only a day and a half. I look something like a boxcar except my sides are made of slats, spaced 2 or 3 inches apart to give my animals plenty of air and ventilation. I may have a heat-deflecting roof, non-skid floor and side supports to protect livestock from heat in hot weather and from slipping and falling. In wintry weather I try to protect animals from the cold. I have extra wide doors for loading and unloading. What am I? Livestock car.

6. I have 32 wheels and the center of me is depressed. I carry huge machinery or electric transformers ride in my center. My center is depressed so I can go under bridges and through tunnels with my cargo. I am super. What am I? Super Flat Car.

---

*Use task cards 2 through 11 with the riddle page.

7. I am very flat and you can call my top a platform with no top or walls. Stakes along my sides keep my cargo from falling off. I haul large machinery, logs, boards and big tractors. I work for the lumber mills in 2 ways by hauling logs from the forest to the saw mill and I haul the lumber from the mill to the market. At Christmas time I have a special job of hauling Christmas trees. What am I? Flat Car.

8. I carry coal and gravel and different kinds of ore. I am loaded from the top by automatic loaders. Switch engines move me under the loading bin and my cargo goes down a chute into me. What am I? Hopper.

9. I look like the hopper but I have a little roof over my top. There are 8 little doors that open on my roof. I carry sugar, cement, grain and things that must be protected from the weather. I am filled by long, slender chutes coming down from elevators. Any slice of bread you eat is made from grain and that grain has usually been on a train ride with me. What am I? Covered hopper.

10. I carry fruit, vegetables, frozen foods, meat, fish, butter, eggs, fresh flowers. I run by diesel fuel and am kept at 70 degrees or as low as 10 degrees below 0. I am sometimes called a "reefer" and my floors, walls and roof are insulated. Sometimes I have a fan which helps to circulate air throughout my load. What am I? Refrigerator car.

Lesson 6 (Optional)

PURPOSE

To provide pupils with a first hand look at the various activities, goods, services and workers on a train and at the railroad station.

MATERIALS

1. Field trip arrangements (Call Am Track).*
2. Permission slips.
3. Field trip questionnaire, next page.

INTRODUCTION

Say: "We've talked about many ways we depend on the services of the railroad. We've talked about goods that are transported by train. We've talked about many jobs and responsibilities necessary to the operation of a railroad. We've been able to see the need for safety with trains. Today we will see for ourselves some of the things that are of special interest. Try to keep in mind, as you watch people working, the various skills needed to run a railroad."

CLASS ACTIVITIES

1. Go over field trip questionnaire.
2. Take a field trip--ride on a train, if possible.

SUMMARY

1. Class discussion to review the questions on the questionnaire.
2. Write thank you notes to the train station.

*To the teacher: Perhaps a visitor from AmTrack could substitute for a field trip.

FIELD TRIP QUESTIONNAIRE
(To be used with Lesson 6)

1. How many people does it take to operate a train? Name some of the jobs.

2. How many railroad related jobs are there? Name some.

3. What are the workers responsible for? Do they have to work together?

4. What items are transported by rail?

5. Why would trains be used rather than trucks or buses?

6. How are trains made safe?

7. Why is the railroad important to our community?

8. What school learned skills do you need in order to do your job well? (Reading, math, spelling, cooperation, listening, etc.).

9. How many kinds of cars, number of cars, different railroads represented, and markings on cars can you find?

10. Why are different railway cars needed?

11. Why trains of cars instead of single cars are operated?

Lesson 7

PURPOSE

To develop the students' understanding of how much they've become aware of railroad workers, activities, goods and services.

MATERIALS

1. Tape recorder.
2. Tape from pretest.
3. Entry Level Assessment.
4. Task cards.

INTRODUCTION

Say: "Today we will find out how much we've learned about the railroad. Let's listen to the tape we made before the unit began. Let's find out how much more we know now."

CLASS ACTIVITIES

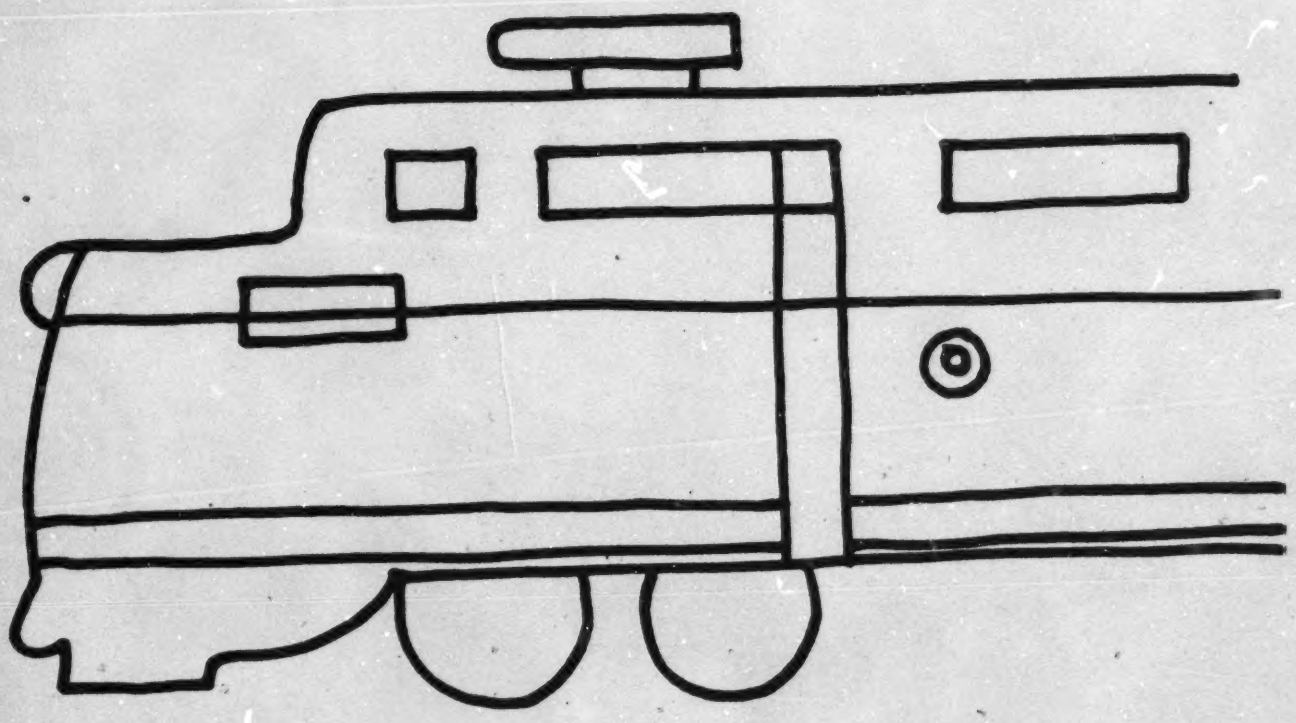
1. Listen to pretest tapes.
2. Make a new tape as a post-test.
3. Free use of task cards.

SUMMARY

The children should feel free to talk about things they've enjoyed about this unit. They should feel free to express likes and dislikes.

TASK CARD 1

ENGINE

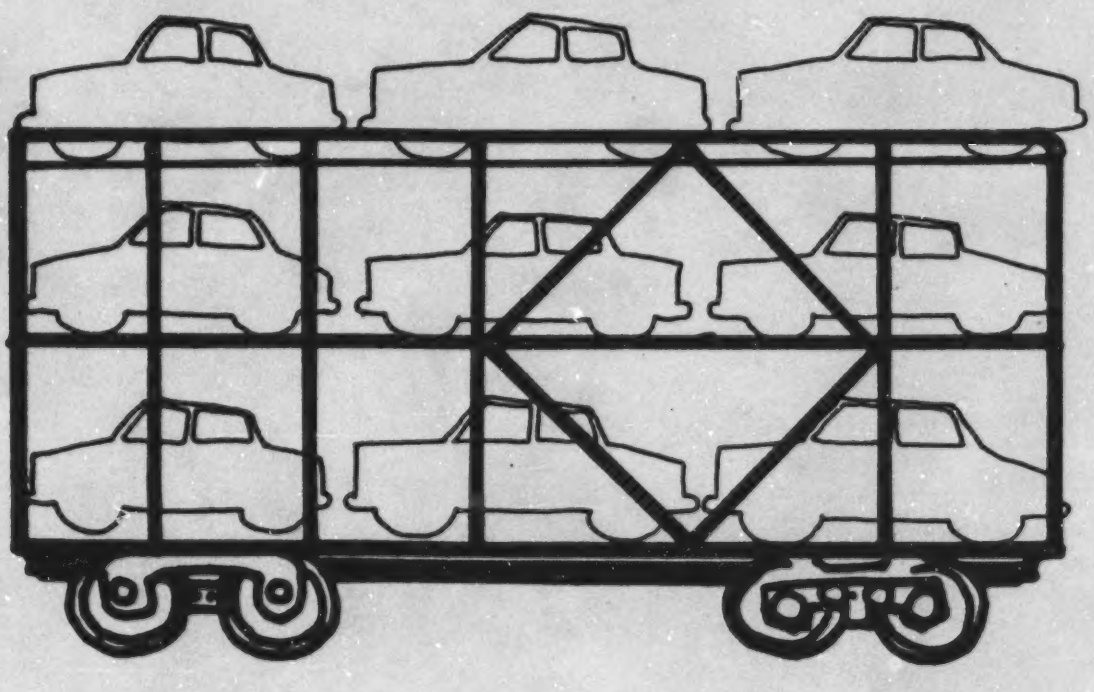


You need:

-9" x 12" manila
-scissors
-crayons

This is the engine of the train. The engine pulls the train along the track. Make an engine for our mural. Color it a bright color.

AUTO CAR



You need:

-9" x 12" manila
-scissors
-crayons

Auto car carries new cars from the factory and carries them to all parts of the country. Each railroad car carries nine standard size cars and can carry 15 compact cars.

Make an auto car for our mural. Color the automobiles many different colors.

TANK CAR

You need:

-9" x 12" manila
-scissors
-crayons

Tank cars are really big cans with different kinds of linings. Milk cars are glass or steel-lined. Cars that carry chemicals are lined with rubber, lead, or aluminum. Tank cars have one or more domes on top. In warm weather the liquid expands and goes up into the dome so it will not break the seams. There are 200 different kinds of tank cars.

Make a tank car for our mural!

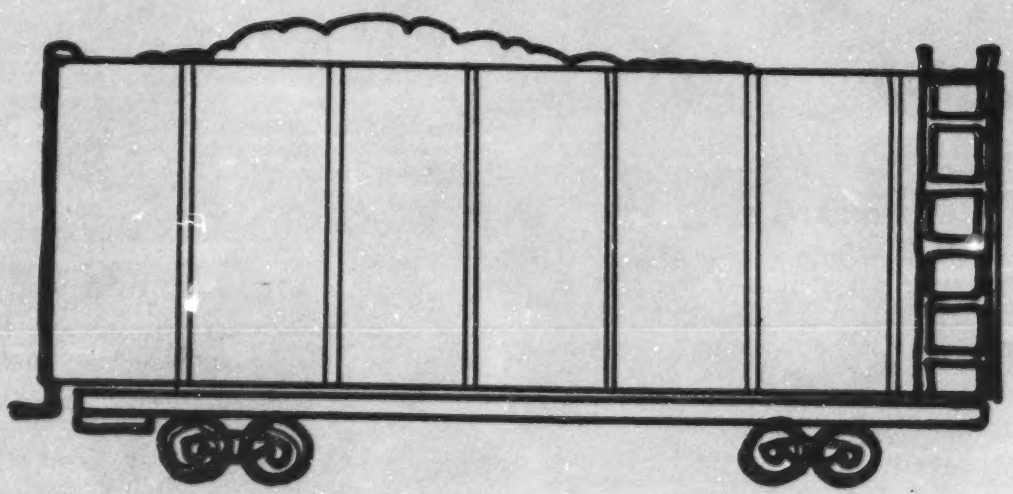
GONDOLA CAR

You need:

-9" x 12" manila
-crayons
-scissors

A gondola is a metal box that has no top. It carries things that snow and rain can't hurt. The gondola is loaded and unloaded by men. Sometimes the men use machines to load the cars. They haul pieces of machinery, pipes, cement blocks, steel plates and other things.

Make a gondola car for our mural.

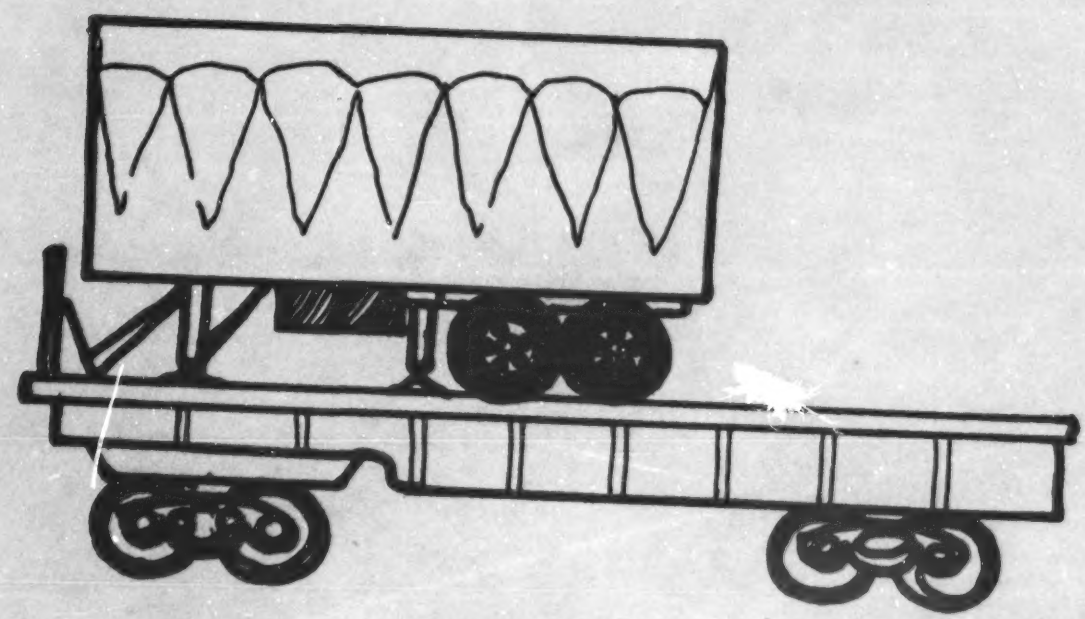


PIGGY-BACK CAR

You need:

- 9" x 12" manila
- scissors
- crayons

A piggy-back car carries trailer boxes. Some cars carry one and some carry two. Some trains are made up of only piggy-back cars and travel mostly at night. The trailer box is secured to the deck of the piggy-back car and jacks are placed under the box. The jacks hold the box up in case of a flat tire.



CATTLE CAR

You need:

- 9" x 12" manila
- scissors
- crayons

A cattle car carries cattle and has one deck. If it is carrying sheep and pigs it will have two decks. Cars that carry chickens and turkeys have many decks. Animals may travel only for a day and a half.

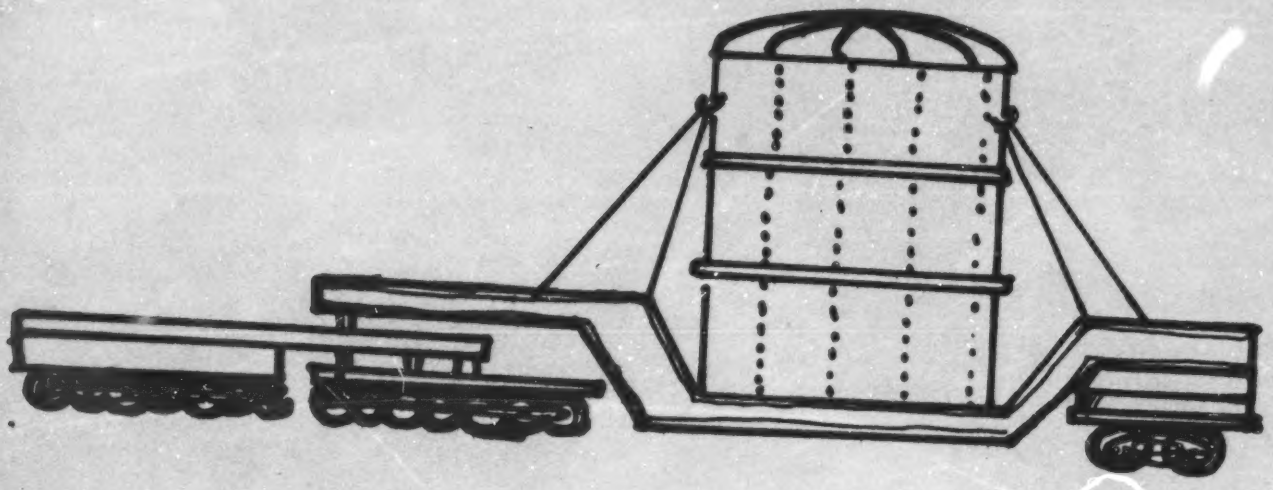
SUPER FLAT CAR

You need:

- 9" x 12" manila
- scissors
- crayons

A super flat car has 32 wheels and the center of the car is depressed. Huge heavy machinery or electric transformers are carried in the center. The center is depressed so it can go under bridges and through tunnels with its cargo.

Make a super flat car for our mural.



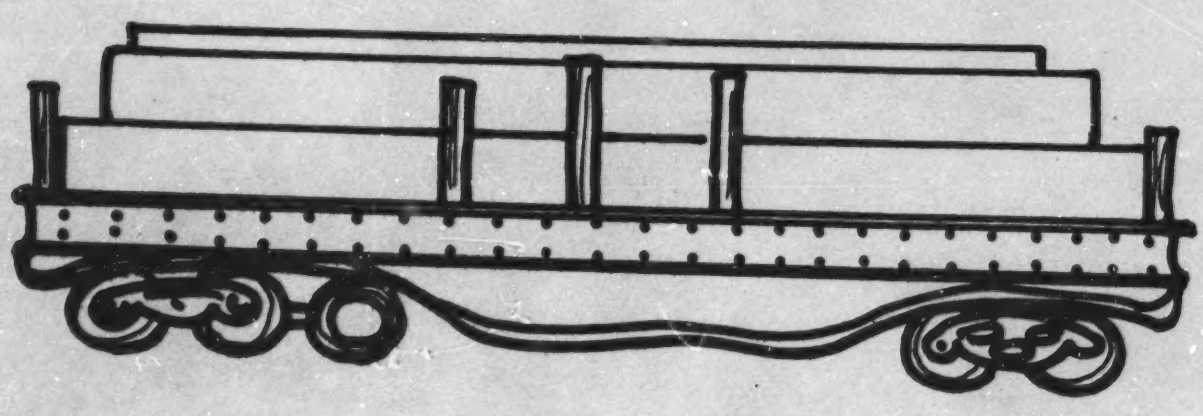
FLAT CAR

You need:

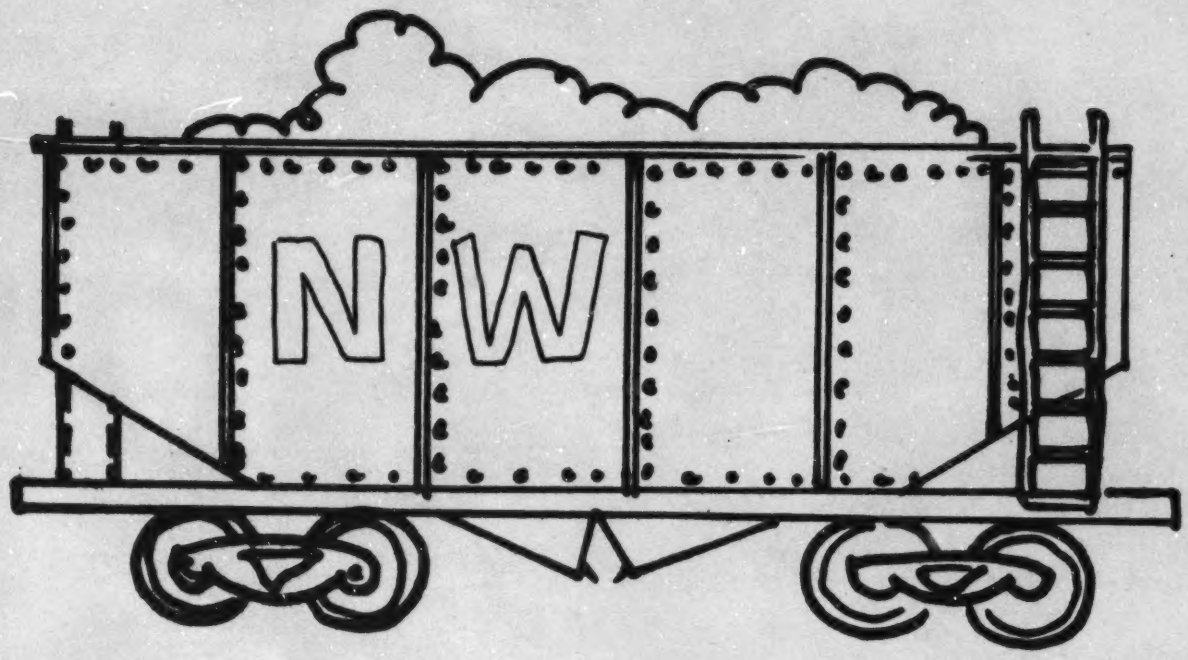
-9" x 12" manila
-scissors
-crayons

A flat car is a platform on wheels with no top or walls. Stakes along the sides keep the cargo from falling off. Haul large machinery, logs, boards, and big tractors on the flat car.

Make a flat car for our mural.



HOPPER CAR



You need:

-9" x 12" manila
-scissors
-crayons

A hopper carries coal, gravel and different kinds of ore. It is loaded from the top by an automatic loader. Switch engines move the hopper under the loading bin. The goods move through chutes into the hopper.

Make a hopper car for our mural.

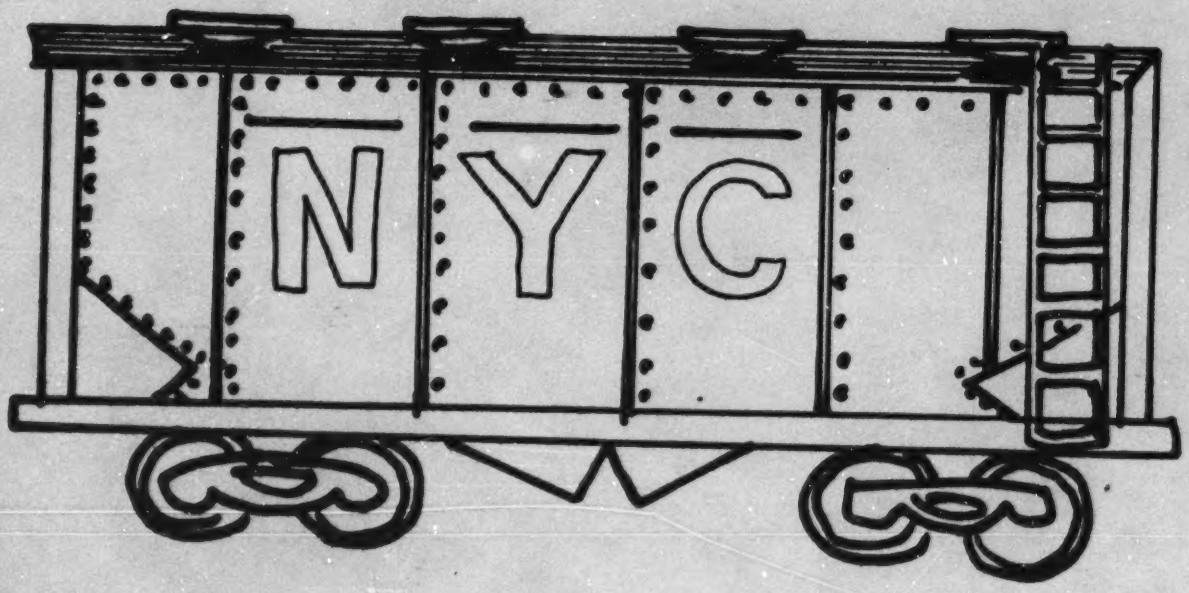
COVERED HOPPER CAR

You need:

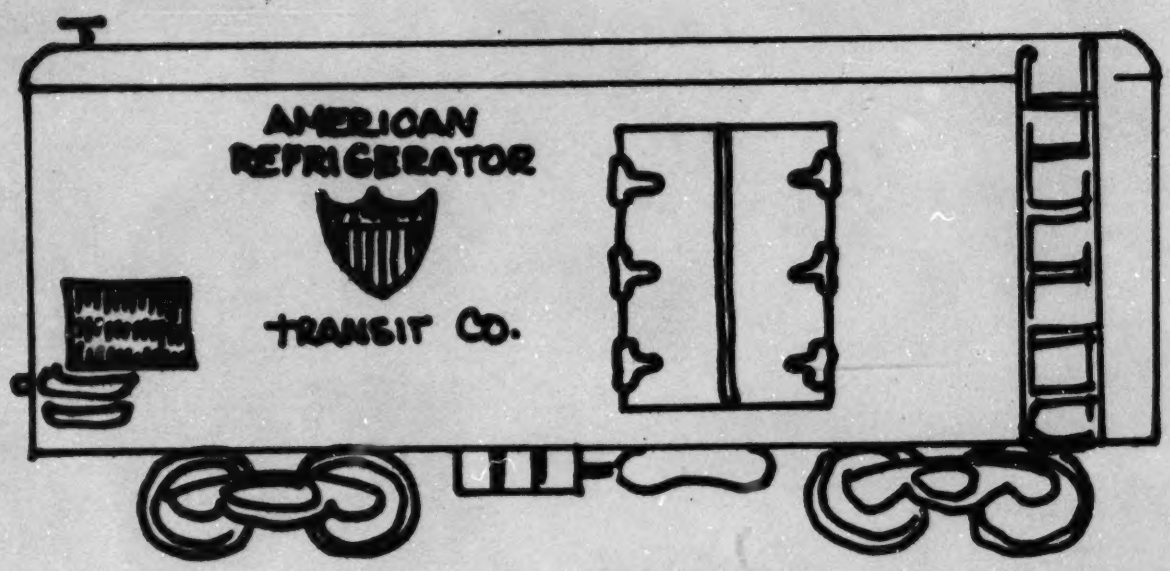
- 9" x 12" manila
- scissors
- crayons

A covered hopper has a roof over the top. There are 8 hatches on the roof and they are opened in order to load the hopper. This car carries sugar, cement, and grain and is protected from moisture.

Make a covered hopper car for our mural.



REFRIGERATOR CAR



You need:

-9" x 12" manila
-scissors
-crayons

A refrigerator car carries fruits, vegetables, frozen foods, meat, fish, butter, eggs and fresh flowers. Refrigerator cars are run by diesel fuel and kept at 70° or as low as 10°.

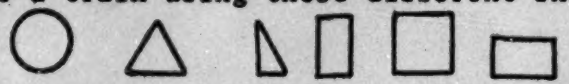
Make a refrigerator car for our mural.

MAKE YOUR OWN TRAIN

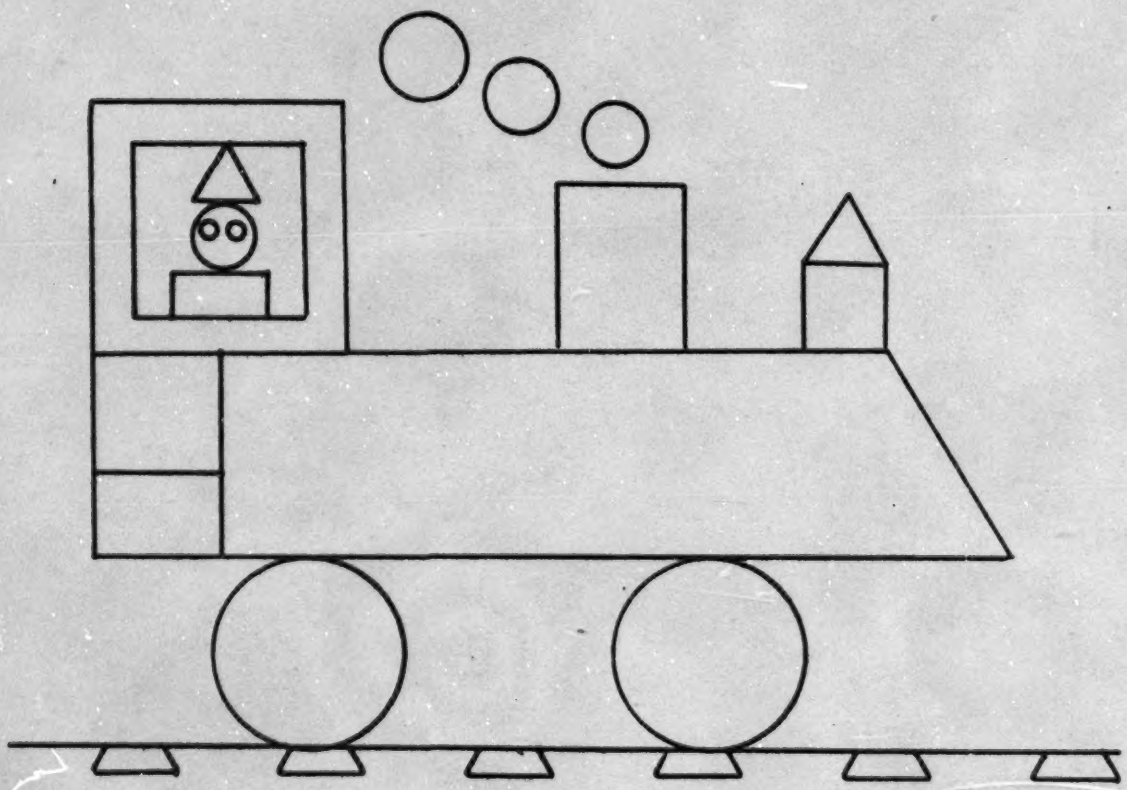
You need:

- -scissors
- -manila paper
- -construction paper

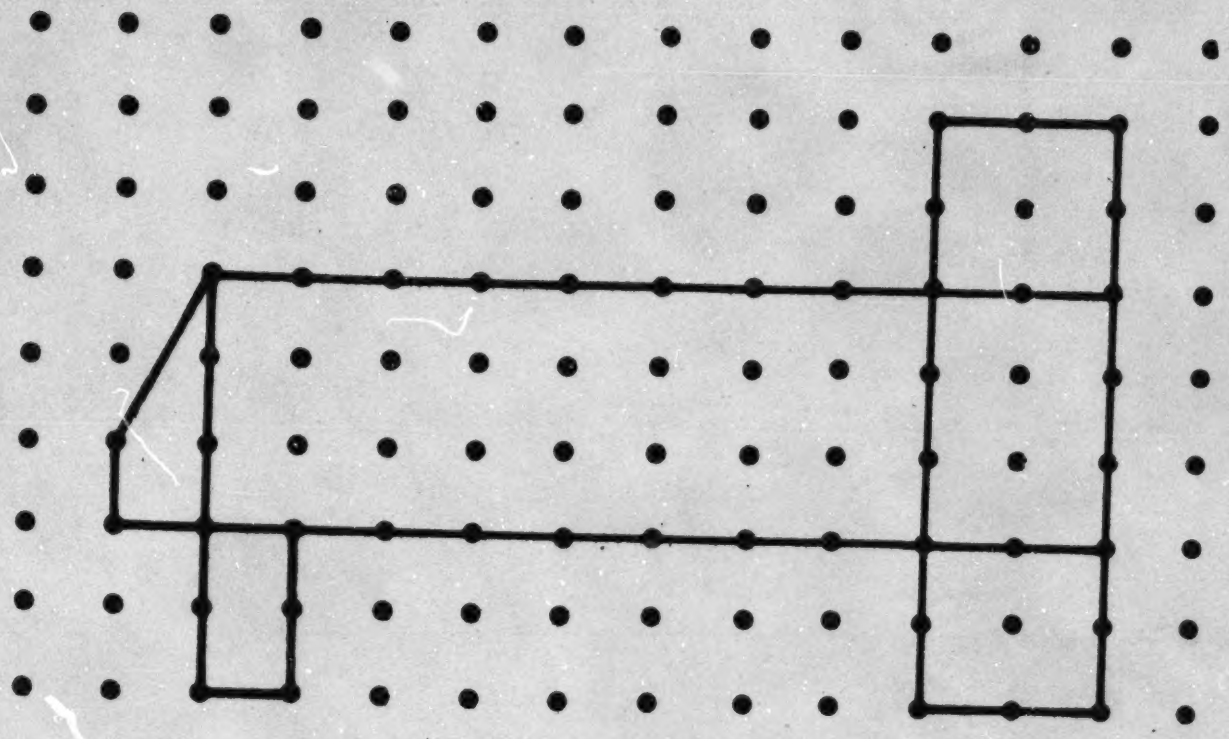
Make a train using these different shapes:



Save your picture for our Shape Train Booklet.



GEO BOARD TRAIN



You need:

-rubber bands
-Geo Board

See if you can arrange the rubber bands to make the shape of a train engine.

SEND IT BY TRAIN!

You need:

- -magazines
- -scissors
- -construction paper (12" x 18")

How many food items can you find in the magazine that might have come to our community by train? Cut out the pictures and put them on construction paper.

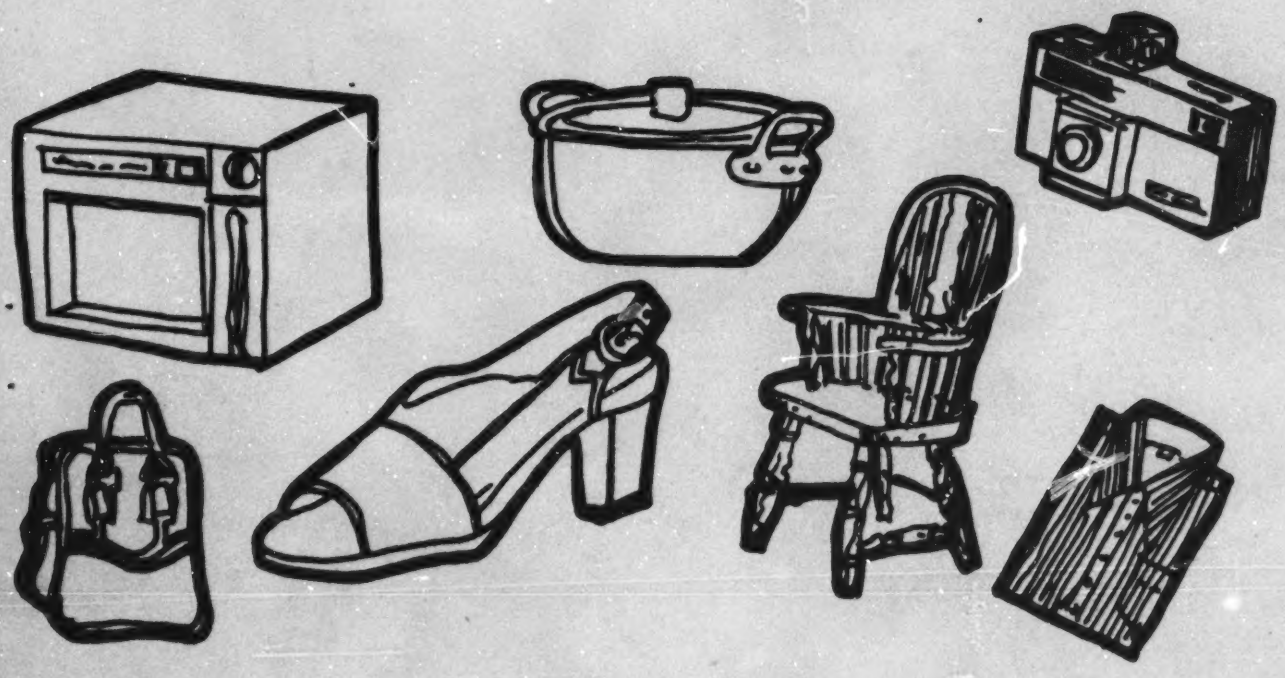
TASK CARD 15

FASTER BY TRAIN!

You need:

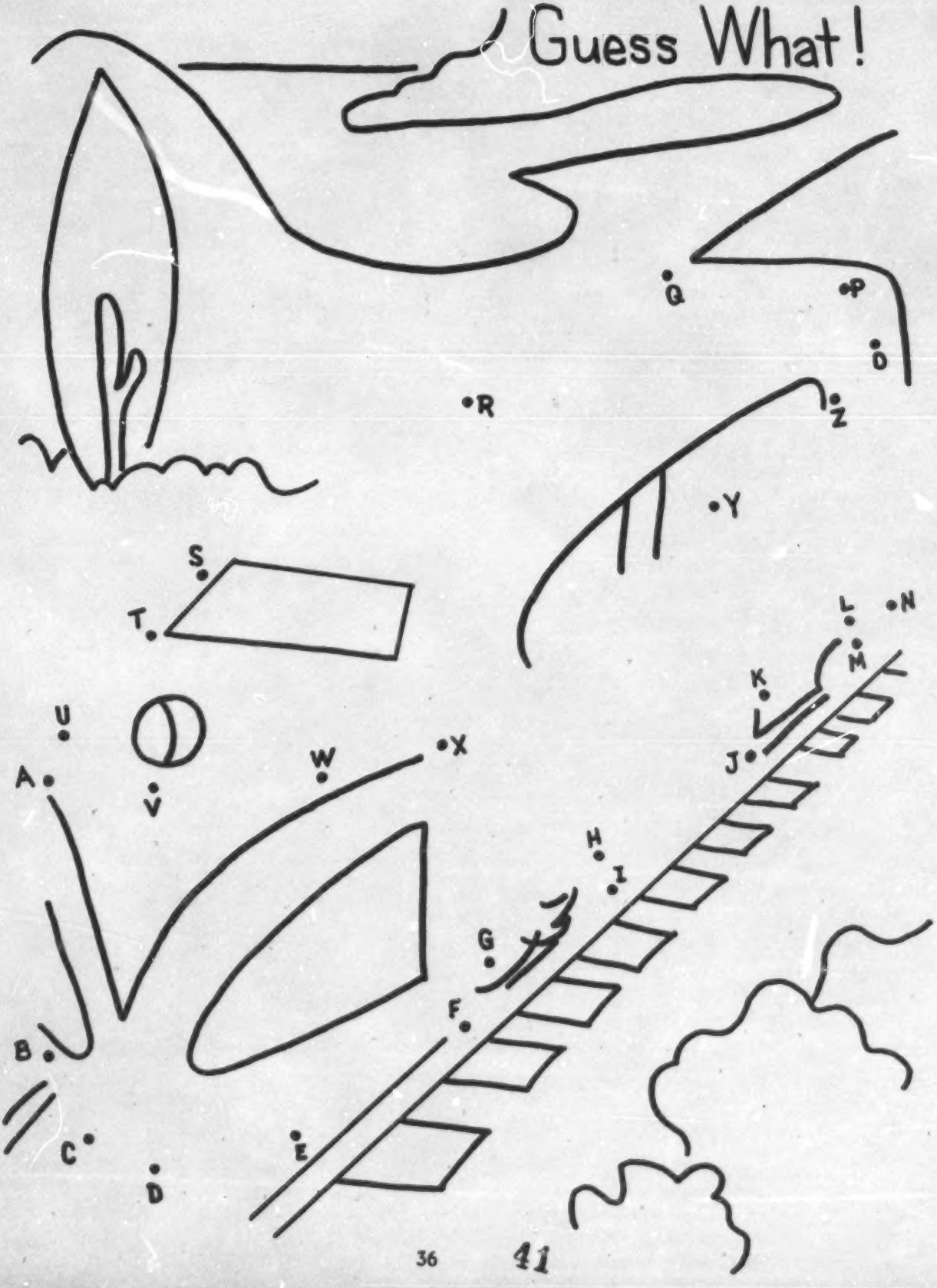
- -magazines
- -scissors
- -construction paper

How many items can you find in the magazine that might have come to our community by train? Cut out the pictures and put them on construction paper.



TASK CARD 16

Guess What!



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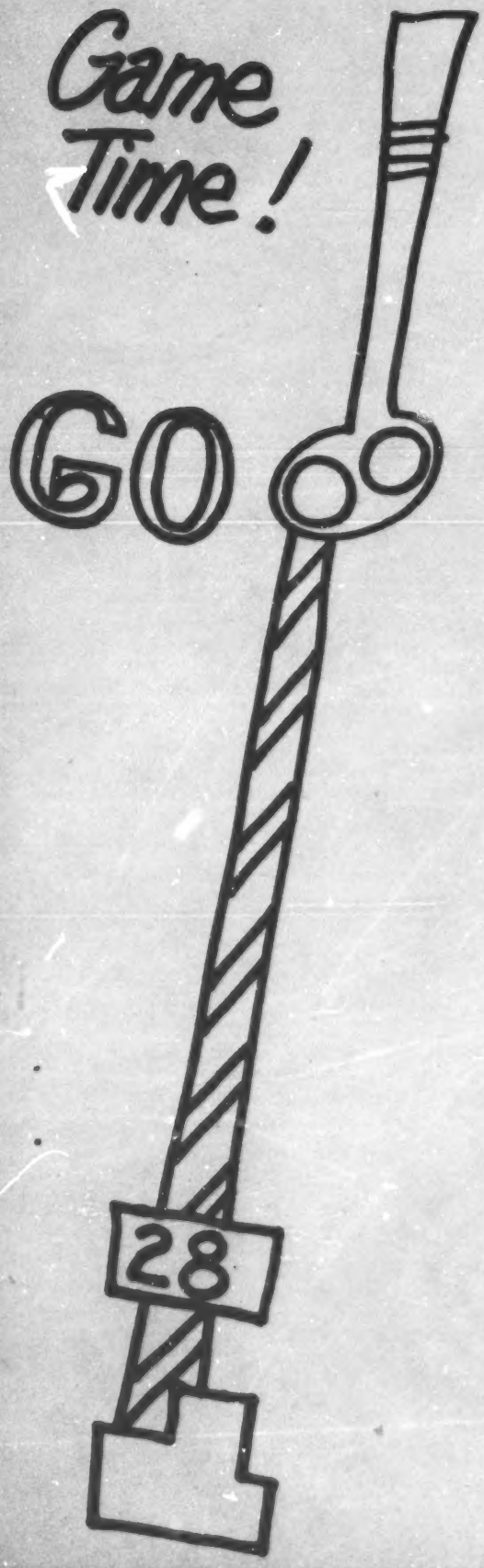
TASK CARD 17
(Teacher Use)



GAME TIME

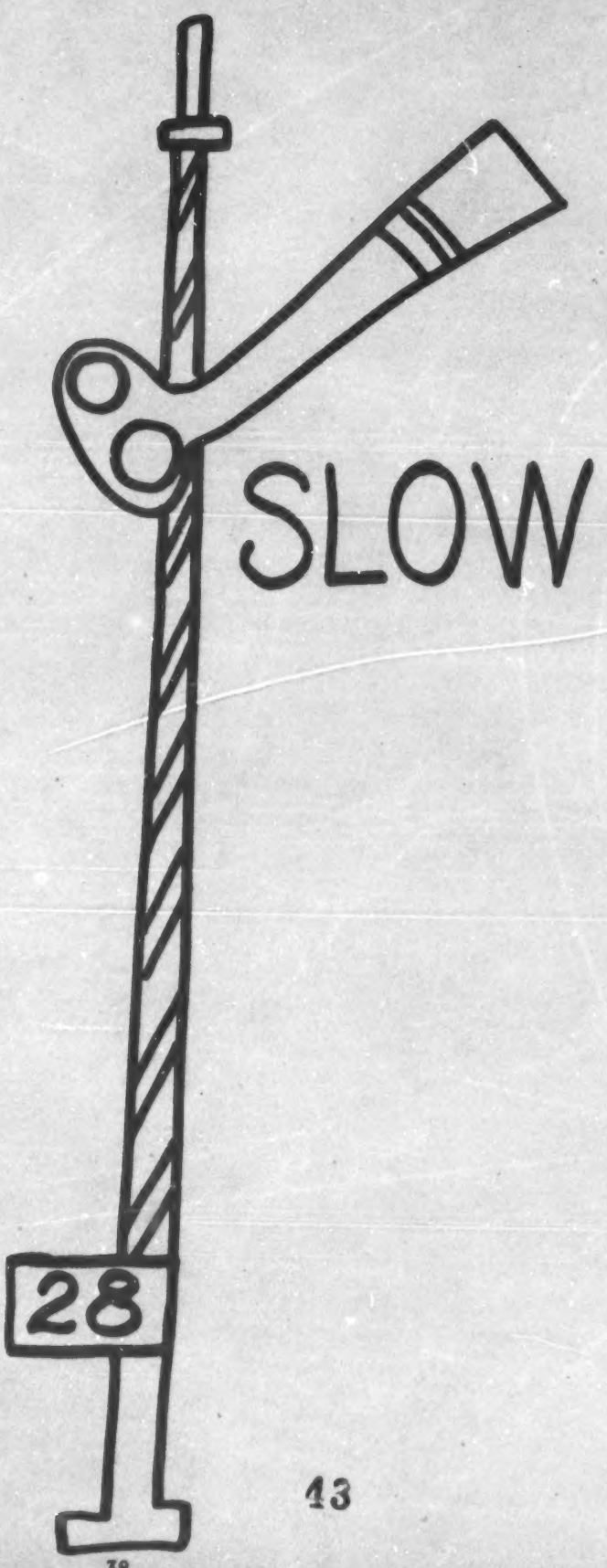
You need:

-good singing voices
-many children
-all three task cards
(17-17a-17b)

This may be used as a safety game with a group of children making the train. One person is the signal using the task cards to help children get the idea of placement of one arm.

Song "Little Red Caboose" helps children get their feet going in the correct movement.

TASK CARD 17a



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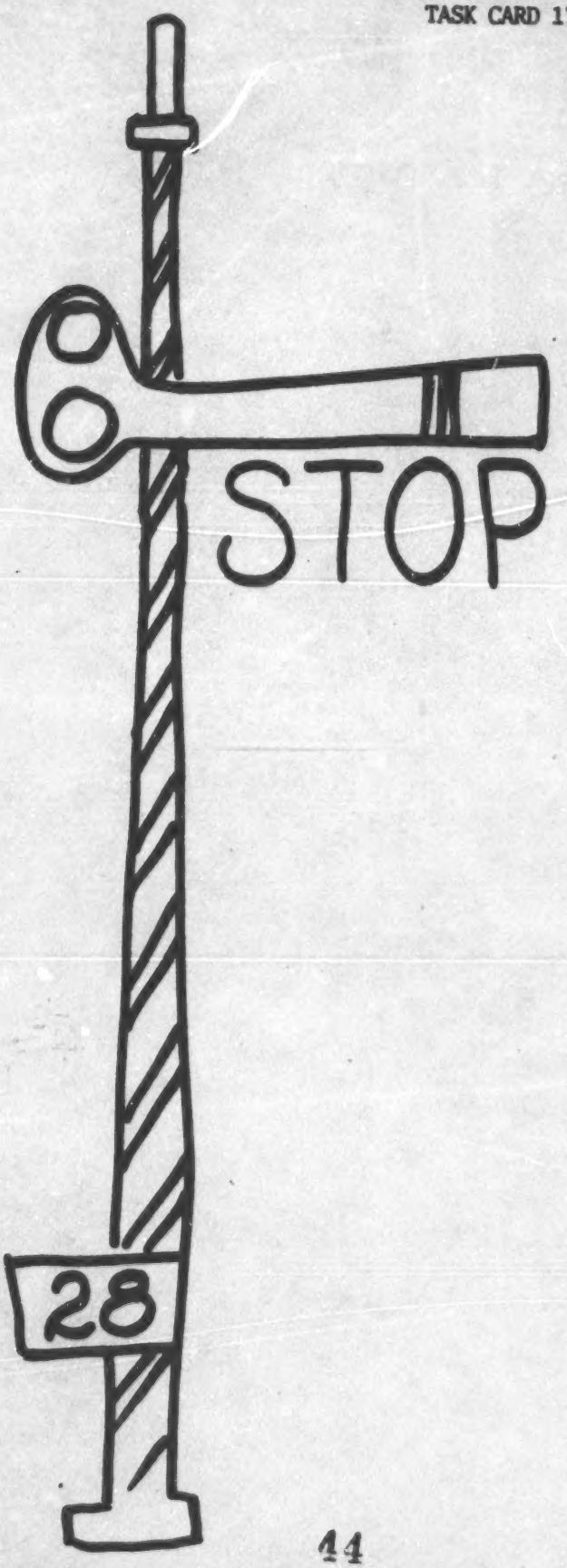
TASK CARD 17b



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RAILROAD ALPHABET

You need:

-magazines
-scissors
-construction paper (12" x 18")
-manila (12" x 18")

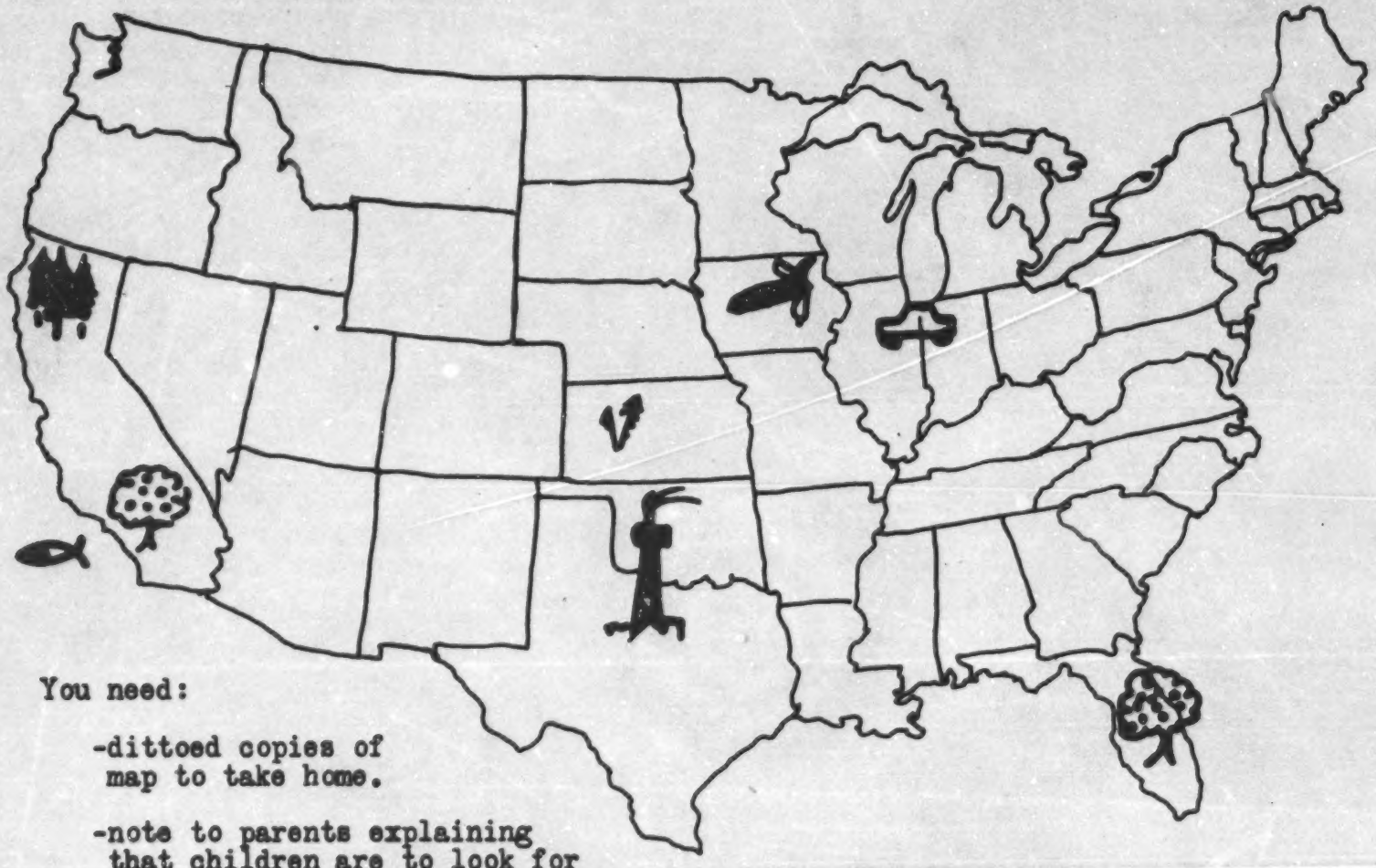
Each child may pick a letter of the alphabet and prepare a page for an alphabet scrap book for the classroom.

Make a classroom booklet for the Railroad Alphabet.

A is for Animals in stock cars they ride.
B is for Boxcar with doors that are wide.
C is for Caboose in which the train crew rides
D is for Dome car with glass on all sides.
E is for Engineer who runs the big train
F is for Food from California to Maine.
G is for Gondola, an open-top car
H is for Hopper which carries coal far.
I is for Industry, served of rail
J is for Journey taken by rail.
K is for Kitchen where cooks prepare meals.
L is for Locomotives which have many wheels.
M is for Mail picked up "on the fly."
N is for our Needs that the railway supplies.
O is for Operator in station or tower
P is for Piggyback--trucks by train power.
Q is for Quantity for freight carried by tons
R is for Rails on which the train runs.
S is for Signals which tell trains to pass
T is for Tank cars for milk, oil, or gas.
U is for United States with its network of track.
V is for Views of which there's no lack.
W is for Workers, a million of times.
X is for X, marking private car lines.
Y is for Yards, busy in sunshine or rain.
Z is for Zebra on the big circus train.

Children may make book by either drawing the pictures, cutting them out from magazines or using some of the previous materials.

Where does it come from? . . .



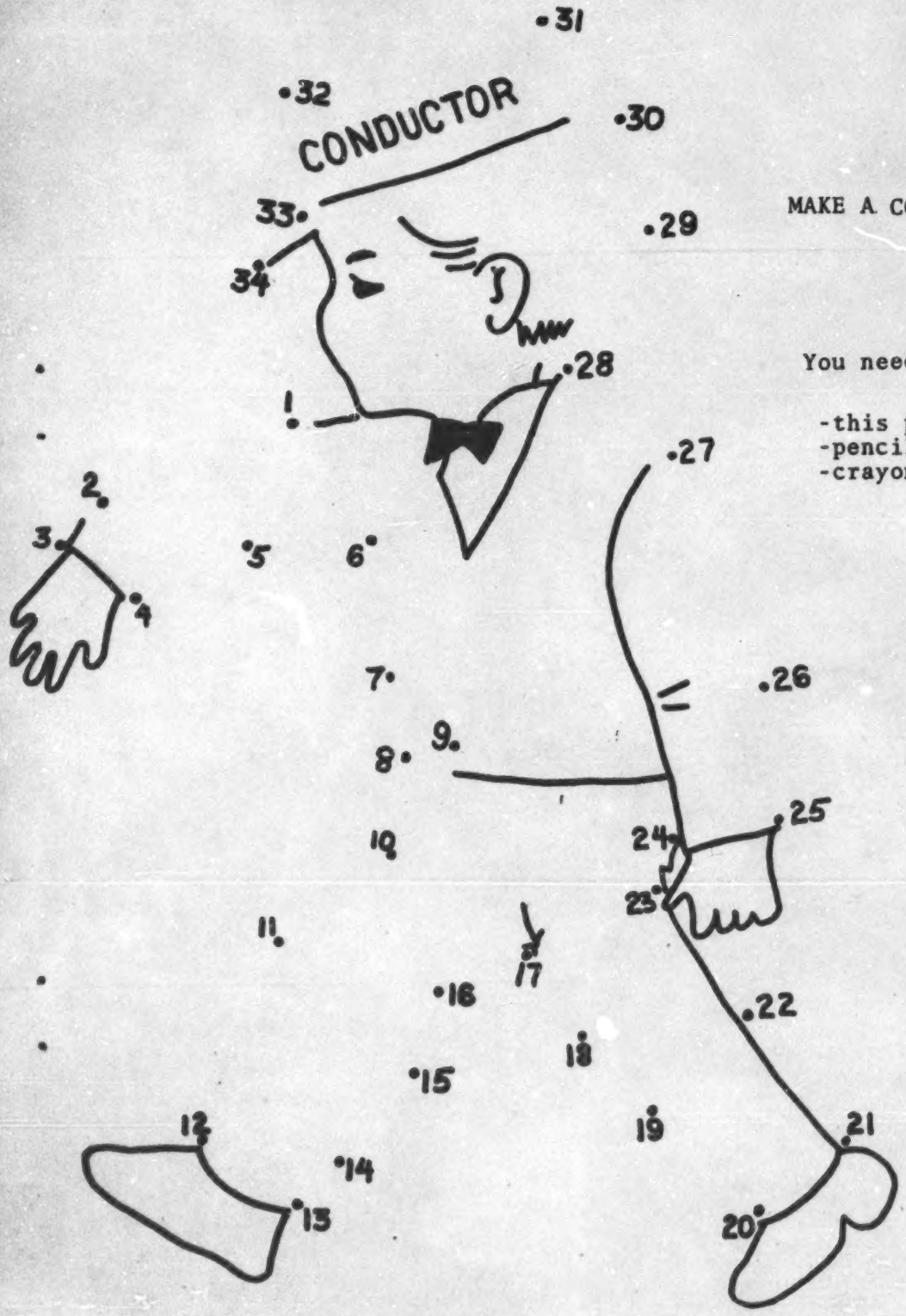
You need:

-dittoed copies of map to take home.

-note to parents explaining that children are to look for things in their homes that tell where they came from (Wyler's Cup of Soup-Northbrook, Illinois; Hamburger Helper-Minneapolis, Minnesota)

TASK CARD 19

TASK CARD 20



MAKE A CONDUCTOR

You need:

-this page dittoed
-pencils
-crayons

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TASK CARD 21

MAKE AN

ENGINEER!

You need:

-9" x 12" construction paper in various colors
-scrap construction paper in flesh, red, yellow, blue and assorted colors
-paste
-scissors

Make an engineer with shapes.

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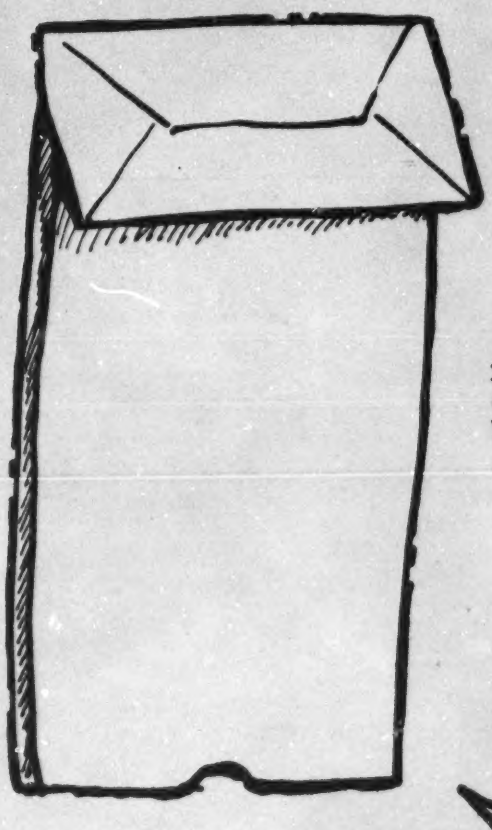
PUPPET TIME!

ACT IT OUT-TELL WHAT I DO



front of the bag

You need:

-engineer puppet
-scissors
-paper bags
-paste
-crayons

Look at my watch

Check my dials

Move the throttle

Look for signals

Crossing coming-toot whistle

Leave a car to be filled with clothes and furniture

Stop here to pick up a refrigerator car

Back up, go forward

The student should make the puppet with the opening of the bag facing downward.